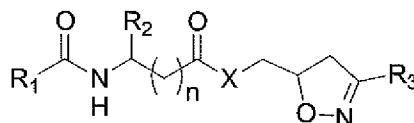


AMENDMENTS

In the claims:

1. (Currently Amended) A tTGase inhibitor of the formula:



wherein R₁ and R₂ are independently selected from H, alkyl, alkenyl, cycloalkyl, aryl, heteroalkyl, heteroaryl, alkoxy, alkylthio, aralkyl, aralkenyl, halo, haloalkyl, haloalkoxy, heterocyclyl, and heterocyclylalkyl groups, an amino acid, a peptide, a peptidomimetic, or a peptidic protecting group; wherein R₂ can additionally be selected from the group consisting of LPYPQPQLPY (**SEQ ID NO:1**), LPFPQPQLPF-NH₂ (**SEQ ID NO:2**), LPYPQPQLP (**SEQ ID NO:3**), LPYPQPQLPYQPQP (**SEQ ID NO:4**), and LP-X₂₋₁₅, where **wherein** X₂₋₁₅ is a peptide consisting of any 2-15 amino acid residues followed by a C-terminal proline; R₃ is selected from F, I, Cl, and Br; n is from 0 to 10; and X is selected from the group consisting of O and NH, other than {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester.

2. (Currently Amended) The inhibitor of Claim 1, wherein R₁ is selected from the group consisting of BnO, Me, Cbz, Fmoc, Boc, PQP, Ac-PQP, PQPQLPYPQP (**SEQ ID NO:5**), Ac-PQPQLPFPQP (**SEQ ID NO:6**), QLQPFQP (**SEQ ID NO:7**), LQLQPFQPQLPYPQP (**SEQ ID NO:8**), and X₂₋₁₅-P, where **wherein** X₂₋₁₅ is a peptide consisting of any 2-15 amino acid residues followed by a N-terminal proline.

3. (Currently Amended) The inhibitor of Claim 1, wherein R₂ is selected from the group consisting of (S)-Bn, (S)-CO₂Me, (S)-Me, (R)-Bn, (S)-CH₂CONHBn, (S)-(1*H*-inol-yl)-methyl, (S)-(4-hydroxy-phenyl)-methyl, OMe, OtBu, Gly, Gly-NH₂, LPY, **and** LPF-NH₂.

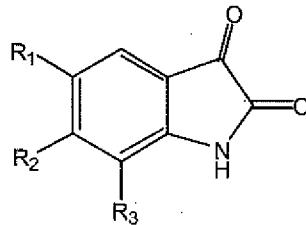
4. (Original) The inhibitor of Claim 1, wherein R₃ is Br.

5. (Currently Amended) The inhibitor of Claim 1, wherein said tTGase inhibitor is selected from the group consisting of:

{(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic

acid benzyl ester; (S)-2-Benzylloxycarbonylamino-4-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-butyric acid methyl ester; (S)-2-Benzylloxycarbonylamino-N-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-succinamic acid methyl ester; (S)-2-Benzylloxycarbonylamino-3-phenyl-propionic acid 3-bromo-4,5-dihydro-isoxazol-5-ylmethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; (S)-2-Acetylamino-N-(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-phenyl-propionamide; {(R)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester; {(S)-2-Benzylcarbamoyl-1-[(3-bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-ethyl}-carbamic acid benzyl ester; [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(1H-indol-3-yl)-ethyl]-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-phenyl-ethyl}-carbamic acid benzyl ester; [(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-methyl-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl]-carbamic acid benzyl ester; 1-(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-phenyl-urea; 1-(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-(2-chloro-5-trifluoromethyl-phenyl)-urea; 1-(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-(4-chloro-2-trifluoromethyl-phenyl)-urea; 1-(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-(4-fluoro-phenyl)-urea; 1-(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-3-(2,5-dimethyl-phenyl)-urea; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-fluoro-phenyl)-ethyl}-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(3-fluoro-phenyl)-ethyl}-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(1H-indol-3-yl)-ethyl}-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(5-hydroxy-1H-indol-3-yl)-ethyl}-carbamic acid benzyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid pyridin-4-ylmethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid pyridin-3-ylmethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid phenethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid naphthalen-2-ylmethyl ester; {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid 1,1-dioxo-1H-1 λ 6-benzo[b]thiophen-2-ylmethyl ester; and {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(5-hydroxy-1H-indol-3-yl)-ethyl}-carbamic acid 1,1-dioxo-1H-1 λ 6-benzo[b]thiophen-2-ylmethyl ester.

6. (Currently Amended) A tTGase inhibitor of the formula:



where wherein R_1 , R_2 and R_3 are independently selected from H, a halo group, alkyl, aryl, and NO_2 .

7. (Currently Amended) The tTGase inhibitor of Claim 11, wherein said inhibitor is selected from the group consisting of:

2,3-Dioxo-2,3-dihydro-1H-indole-5-sulfonic acid propylamide; 2,3-Dioxo-2,3-dihydro-1H-indole-5-sulfonic acid benzylamide; (S)-1-(2,3-Dioxo-2,3-dihydro-1H-indole-5-sulfonyl)-pyrrolidine-2-carboxylic acid methyl ester; (S)-2-(2,3-Dioxo-2,3-dihydro-1H-indole-5-sulfonylamino)-3-phenyl-propionamide; (S)-N-(2-Dimethylamino-ethyl)-2-(2,3-dioxo-2,3-dihydro-1H-indole-5-sulfonyl amino)-3-phenyl-propionamide; 6-Bromo-7-methyl-1H-indole-2,3-dione; and 7-Methyl-6-phenyl-1H-indole-2,3-dione.

8. (Currently Amended) A formulation for use in treatment of Celiac Sprue and/or dermatitis herpetiformis, comprising:

an effective dose of the tTGase inhibitor according to any of claim 1 and a pharmaceutically acceptable excipient.

9. (Currently Amended) A method of treating Celiac Sprue and/or dermatitis herpetiformis, the method comprising:

administering to a patient an effective dose of a formulation according to Claim 8; wherein said tTGase inhibitor attenuates gluten toxicity in said patient.

10. (Original) The method of Claim 9, wherein said formulation is administered with a glutenase.

11. (Original) The method according to Claim 9, wherein said formulation is administered orally.

12. (Original) The method according to Claim 9, wherein said formulation comprises an enteric coating.

13 (new) The tTGase inhibitor of Claim 1, wherein the inhibitor is {(S)-1-[(3-Bromo-4,5-dihydro-isoxazol-5-ylmethyl)-carbamoyl]-2-(4-hydroxy-phenyl)-ethyl}-carbamic acid pyridin-3-ylmethyl ester.